

REMARKS

In view of the rejections in the final Action, an RCE has been filed, wherein claims 1-14 have been amended in a process of producing a stent, and 51-78 have been canceled. Claims pending in the application are all directed to a process of forming the stent.

In the process of forming the stent of the invention, the stent is entirely covered by the films, and thereafter, a plurality of fine through pores is perforated at portions where the stent matrix does not exist. Accordingly, the stent is not exposed to blood through the fine through pores in use.

In Figs. 3 and 4 of Dereume et al., a cover 33 and a liner 34 are constructed of porous polymers with a tubular support 22 therein. In this respect, it is explained at column 6, lines 1-13 that:

"When a graft 31 having both a cover 33 and a liner 34 is prepared, a mandrel or rod is dipped into a liquid polymer having elutable particles as discussed herein dispersed therewithin. After dipping, the polymer covered rod is contacted with, such as by dipping or spraying, a solvent, for the elutable particles, such as water, thereby forming the eluted porous liner 34. Thereafter, the tubular support 32 is positioned thereover and pressed down into the liner. Then, the rod and the assembly thereon are again dipped into the mixture of polymer and elutable particles, followed by setting and contact with solvent to remove the elutable particles in order to form the eluted porous cover 33."

In the invention, after the stent matrix is entirely covered by the polymer layers or films, the fine through pores are formed at the portions where the stent matrix does not exist. In the invention, the fine pores penetrating the stent surely exist. However, in Dereume et al., the cover 33 is formed to have the pores, the tubular support is mounted, and the liner 34 is formed to have the pores.

In paragraph 4 of the final Action, it was held that "Examiner respectfully points out that this does not further limit the claim in view of the prior art, since through pores still exist at portions where the stent matrix does not."

Claims of the invention are now directed to the process, wherein after the covering the stent matrix by the polymer layer, the polymer layer is perforated. The steps in the claims are entirely different from those of Dereume et al. The perforation step of the invention is not disclosed or suggested in Dereume et al.

In addition, in case a porous polyurethane material like Dereume et al. is placed in a blood vessel, the polyurethane material is quickly dissolved in the blood vessel by hydrolysis and enzymatic decomposition. Therefore, the porous polyurethane as disclosed in Dereume et al. is not suitable in using the stent. On the other hand, in the invention, the stent is covered while polyurethane can contact the blood as little as possible.

Dereume et al. does not disclose or even suggest the methods of the invention.

In Edwin, a vascular graft includes a first layer of biocompatible flexible material, a second layer of biocompatible flexible material and a support layer sandwiched between the first and second layers. Namely, a stent 30 is sandwiched between two tubular members, which are connected together by dotted lines 54. In Figs. 1, 8 and 9, the steps for forming the stent are explained, wherein no pores are formed after the stent is formed.

In the invention, a plurality of fine through pores is formed after formation of the polymer layers at portions where the stent matrix does not exist. Edwin does not disclose the fine pores nor steps of forming the pores.

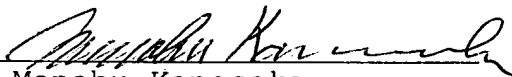
In case Dereume et al. and Edwin are referred, the cover and liner of Dereume et al. can be used in Edwin. However, such a

combination does not disclose the method of the invention. Since Dereume et al. and Edwin do not disclose or suggest that a plurality of fine through pores is perforated at portions where the stent matrix does not exist, claims of the invention are not obvious over Dereume et al and Edwin.

As explained above, the features of the invention are not disclosed or suggested in the cited references. Even if the cited references are combined, claims of the application are not obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

By 
Manabu Kanesaka
Reg. No. 31,467
Agent for Applicants

1700 Diagonal Road, Suite 310
Alexandria, VA 22314
(703) 519-9785